October 2017 1 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Australia	Refinery	Sydney, New South Wales	ABC Refinery (Australia) Pty (Pallion Group Pty Ltd.)
Australia	Refinery	Perth, Western Australia	Western Australian Mint trading as The Perth Mint
Austria	Refinery	Vienna	Ögussa Österreichische Gold- und Silber- Scheideanstalt GmbH (Umicore S.A. Business Unit Precious Metals Refining)
Belgium	Refinery	Antwerp, Flanders	Tony Goetz NV
Belgium	Refinery	Hoboken, Antwerp, Flanders	Umicore S.A. Business Unit Precious Metals Refining
Brazil	Refinery	Nova Lima, Minas Gerais	AngloGold Ashanti Córrego do Sítio Mineração
Brazil	Refinery	Rio de Janeiro, Rio de Janeiro	Casa da Moeda do Brazil (Brazil Mint)
Brazil	Refinery	São Paulo, São Paulo	Marsam Metals
Brazil	Refinery	Guarulhos, São Paulo	Umicore Brasil Ltda.

October 2017 2 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Canada	Refinery	Brampton, Ontario	Asahi Refining Canada Ltd.
Canada	Kernery	Brainpion, Oncario	Asani Kerining Canada Etd.
Canada	Refinery	Montréal, Québec	CCR Refinery - Glencore Canada Corporation
Canada	Smelter	Horne Smelter, Rouyn-Noranda, Québec	Glencore Canada Corp.
Canada	Smelter	Sudbury operations, Sudbury, Ontario	Glencore Canada Corp.
Canada	Refinery	Ottawa, Ontario	Royal Canadian Mint
			,
Canada	Refinery and smelter	Trail smelter, Trail, British Columbia	Teck Resources Ltd.
Canada	Refinery and smelter	Copper Cliff complex, Sudbury, Ontario	Vale Canada Ltd.
China	Refinery	Lingbao, Henan	China National Gold Corp.
China	Refinery	Huangshi, Huabei	Daye Nonferrous Metals Co., Ltd

October 2017 3 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
China	Refinery	Chengdu, Sichuan	Great Wall Precious Metals Co. Ltd. of CBPM
China	Refinery	Hetai, Gaoyao, Guangdong	Guangdong Jinding Gold Limited
China	Refinery	Zhaoyuan, Shandong	Guoda Safina High-Tech Environmental Refinery Co., Ltd.
China	Refinery	Fuyang, Hangzhou, Zhejiang	Hangzhou Fuchunjiang Smelting Co., Ltd.
China	Refinery	Jiyuan, Henan	Henan Yuguang Gold & Lead Co. Ltd.
China	Refinery	Fanling, New Territories, Hong Kong	Heraeus Ltd. Hong Kong
China	Refinery	Huadian, Jilin	Huadian Gold Co. Ltd.
China	Refinery	Huaihua, Hunan	Hunan Chenzhou Mining Industry Co Ltd
China	Refinery	Hohhot, Inner Mongolia	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.

October 2017 4 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
China	Refinery	Guixi City, Jiangxi	Jiangxi Copper Co., Ltd.
Cillia	Refinery	Guixi City, Hangxi	Jiangxi Copper Co., Ltd.
China	Refinery	Lingbao, Henan	Lingbao Jinyuan Tonghui Refinery Co., Ltd.
China	Refinery	Luoyang, Henan	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.
China	Refinery	Kwai Chung, Hong Kong	Metalor Technologies (Hong Kong) Ltd.
China	Refinery	Suzhou, Jiangsu	Metalor Technologies (Suzhou) Co Ltd
China	Refinery	Penglai, Shandong	Penglai Penggang Gold Industry Co., Ltd.
China	Refinery	Lanzhou, Gansu	Seemine Gold Co. Ltd. (a joint venture under Gansu Seemine Material Hi-Tech Co. Ltd.)
China	Refinery	Laizhou, Shandong	Shandong Gold Smelting Co. Ltd. (under Shandong Mining Co. Ltd.)
China	Refinery	Yantai, Shandong	Shandong Humon Smelting Co. Ltd.

October 2017 5 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
China	Refinery	Laizhou, Shandong	Shandong Tarzan Bio-Gold Co. Ltd. (a subsidiary of Shandong Hexi Gold Group Co. Ltd.)
China	Refinery	Shifo, Yanggu, Shandong	Shandong Yanggu Xiangguang Co. Ltd. (under Xiangguang Group Ltd.)
China	Refinery	Zhaoyuan, Shandong	Shandong Zhaojin Gold & Silver Refinery Co. Ltd. (under Shandong ZhaJin Group Co. Ltd.)
China	Refinery	Xi`an, Shanxi	Shanxi Gold Group Xian Qin Gold Co. Ltd.
China	Refinery	Shenzhen, Guangdong	Shenzhen Cuilu Gold Refining Co. Ltd. (a subsidiary Shenzhen Cuilu Gold Industry Co. Ltd.)
China	Refinery	Shenzhen, Guangdong	Shenzhen Zhonghenglong Industrial Co. Ltd.
China	Refinery	Chengdu, Sichuan	Sichuan Tianze Precious Metals Co., Ltd.
China	Refinery	Tongling, Anhui	Tongling Nonferrous Metals Group Co., Ltd.
China	Refinery	Yantai, Shandong	Yantai Penghui Copper Industry Co. Ltd.

October 2017 6 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
		0.11. 77	
China	Refinery	Qujing, Yunnan	Yunnan Chihong Zinc and Germanium Co. Ltd.
China	Refinery	Kunming, Yunnan	Yunnan Copper Industry Co., Ltd.
China	Refinery	Sanmenxia, Henan	Zhongyuan Gold Smelter of Zhongjin Gold Corporation
China	Refinery	Zhuzhou, Hunan	Zhuzhou Smelting Group Co. Ltd.
China	Refinery	Shanghang, Fujian	Zijin Mining Group Co. Ltd. Gold Refinery
Czech Republic	Refinery	Pribram, Central Bohemian	Kovohutě Příbram nástupnická, a. s.
Czech Republic	Refinery	Vestec, Harare	SAFINA A.S.
Finland	Refinery	Pori, Satakunta	Boliden Harjavalta (Boliden Group)
France	Refinery	Paris, Ile-de-France	SAAMP (beginning January 2018, will be SAAMP Groupe SAS)

October 2017 7 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Germany	Refinery	Pforzheim, Baden-Württemberg	Allgemeine Gold-und Silberscheideanstalt A.G.
		, , , , , , , , , , , , , , , , , , , ,	
Germany	Refinery	Hamburg	Aurubis AG
Germany	Refinery	Pforzheim, Baden-Württemberg	C. Hafner GmbH + Co. KG
Germany	Refinery	Pforzheim, Baden-Württemberg	DODUCO GmbH
Germany	Refinery	Pforzheim, Baden-Württemberg	Heimerle + Meule GmbH
Germany	Refinery	Hanau, Hesse	Heraeus Precious Metals GmbH & Co. KG
Germany	Refinery	Halsbrücke, Saxony	SAXONIA Edelmetalle GmbH
Germany	Refinery	Pforzheim, Baden-Württemberg	WIELAND Edelmetalle GmbH
India	Refinery	Bangalore, Karnataka	Bangalore Refinery

October 2017 8 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
India	Refinery	Ravipuram, Cochin	Chemmanur Gold Refinery (P) Ltd.
India	Refinery	Ahmedabad, Gujarat	Edelweiss Metals Ltd. (Edelweiss Financial Services Inc.)
India	Refinery	Ahmedabad, Gujarat	Gujarat Gold Centre (GGC) Pvt Ltd.
India	Refinery	Mumbai, Maharashtra	Indian Government Mint
India	Refinery	Mumbai, Maharashtra	Infinium Precious Resources Private Ltd.
India	Refinery	Chandi Chowk, New Delhi	JALAN & Company
India	Refinery	Haridwar, Uttarakhand	Kundan Care Products Ltd.
India	Refinery	Rudrapur, Uttarakhand	M.D. Overseas Ltd.
India	Refinery	Mewat District, Haryana	MMTC-PAMP India PVT Ltd. (joint venture MMTC Ltd. and PAMP SA Switzerland)

October 2017 9 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
T. P.	D. C.	Market Makaraka	Name de Marada Davina Mata Davina
India	Refinery	Mumbai, Maharashtra	Narrondass Manordass Precious Metals Refinery
India	Refinery	Mumbai, Maharashtra	National India Bullion Refinery
India	Refinery	Mumbai, Maharashtra	National Refinery Pvt Ltd.
India	Refinery	Mumbai, Maharashtra	Parekh Platinum Ltd.
India	Refinery	Rudrapur, Uttarakhand	Rajesh Exports
India	Refinery	Mumbai, Maharashtra	Royal Gold Refinery Pvt. Ltd.
India	Refinery	Parwanoo, Himachal Pradesh	Sai Refinery
India	Refinery	Dhule, Maharashtra	Shirpur Gold Refinery Ltd. (owned by Zee Gold DMCC of Dubai)
India	Refinery	Ahmedabad, Gujarat	Zavery and Co. Pvt. Ltd.

October 2017 10 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Indonesia	Refinery	Jakarta, Java	PT Aneka Tambang (Persero) Tbk
Iran	Refinery	15 kilometers from Takht-e Soleyman, Takeb Region	Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO)
Iran	Refinery	Rafsanjan, Kerman	National Iranian Copper Industries Co. (NICICO) [Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO)]
Italy	Refinery	Arezzo, Tuscany	Chimet S.p.A.
Italy	Refinery	Sesto Fiorentino, Florence	Faggi Enrico S.p.A.
Italy	Refinery	Arezzo, Tuscany	Italpreziosi S.p.A.
Italy	Refinery	Capolona, Tuscany	T.C.A S.p.A
Japan	Refinery	Fuchu, Tokyo	Aida Chemical Industries Co., Ltd.
Japan	Refinery	Kobe City, Hyogo	Asahi Pretec Corp.

October 2017 11 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Japan	Refinery	Tamura, Fukushima	Asaka Riken Co., Ltd.
Japan	Refinery	Ota, Tokyo	Chugai Mining Co. Ltd.
Japan	Refinery	Soka, Saitama	Ishifuku Metal Industry Co., Ltd.
Japan	Refinery	Osaka, Kansai	Japan Mint
Japan	Refinery	Saganoseki, Oita	JX Nippon Mining & Metals Co., Ltd.
Japan	Refinery	Sayama, Saitama	Kojima Chemicals Co., Ltd.
Japan	Refinery	Kosaka, Akita	Kosaka Smelting and Refining Co. Ltd. (a subsidiary of Dowa Eco-System Co. Ltd., a part of the Dowa Holding Co. Ltd.)
Japan	Refinery	Honjo, Saitama	Kosaka Smelting and Refining Co. Ltd. (a subsidiary of Dowa Eco-System Co. Ltd., a part of the Dowa Holding Co. Ltd.)
Japan	Refinery	Iruma, Saitama	Matsuda Sangyo Co., Ltd.

October 2017 12 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
L	D. Correct	No. oliver V. com	Markiti Markita Commenter
Japan	Refinery	Naoshima, Kagawa	Mitsubishi Materials Corporation
Japan	Refinery	Takehara, Hiroshima	Mitsui Mining and Smelting Co., Ltd.
Japan	Refinery	Noda, Chiba	Nihon Material Co., Ltd.
Japan	Refinery	Nara, Nara	Ohura Precious Metal Industry Co., Ltd.
Japan	Refinery	Takehara, Hiroshima	Pan Pacific Copper Co. Ltd.
Japan	Refinery	Saganoseki, Oita	Pan Pacific Copper Co. Ltd.
Japan	Refinery	Hitachi, Ibaraki	Pan Pacific Copper Co. Ltd.
Japan	Refinery	Saijo, Ehime	Sumitomo Metal Mining Co., Ltd.
Japan	Refinery	Hiratsuka City, Kanagawa	Tanaka Kikinzoku Kogyo K.K.

October 2017 13 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Large	Definer	Vali: Caitage	Tokuriki Honten Co., Ltd.
Japan	Refinery	Kuki, Saitama	Tokuriki Honten Co., Lid.
Japan	Refinery	Konan Kochi, Kansai	Yamamoto Precious Metal Co., Ltd.
Japan	Refinery	Sagamihara, Kanagawa	Yokohama Metal Co., Ltd.
Kazakhstan	Refinery	Ust-Kamenogorsk, East Kazakhstan	Kazzinc
Kazakhstan	Refinery	Astana, Akmola	Tau-Ken Altyn Ltd.
Kazakhstan	Refinery	Balkhash, Karaganda Region	TOO Kazakhmys
Korea, Republic of	Refinery	Namdong, Incheon	Daejin Indus Co., Ltd.
Korea, Republic of	Refinery	Gimpo, Gyeonggi	DSC (Do Sung Corporation)
Korea, Republic of	Refinery	Incheon, Seoul	HeeSung Metal Ltd.

October 2017 14 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Korea, Republic of	Refinery	Onsan, Ulsan	Korea Zinc Co., Ltd.
Roled, Republic of	Reimery	Onsuli, Olsuri	Trotter Zine Co., Zita.
Korea, Republic of	Refinery	Onsan, Ulsan	LS-NIKKO Copper Inc.
Korea, Republic of	Refinery	Namdong, Incheon	Samduck Precious Metals
Korea, Republic of	Refinery	Changwon, Gyeongsangnam	SAMWON Metals Corp.
Korea, Republic of	Refinery	Gunsan, Jeollabuk	SungEel HiMetal Co. Ltd.
Korea, Republic of	Smelter	Asan, Chungcheong	Torecom Corp.
Kyrgyzstan	Refinery	Karabalta, Karabalta	Kygyzaltyn JSC
Malaysia	Refinery	Kawasan Perindustrian Bukit Rambai, Melaka	Modeltech Sdn Bhd
Malaysia	Refinery	Bukit Selinsing Koyan, Pahang	Monument Mining Ltd. of Canada

October 2017 15 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Malaysia	Refinery	Penjom, Pahang	PT J Resources Asia Pasifk Tbk (J&Partners, L.P., 100%)
Mexico	Refinery	Torreon, Coahuila	Metalúrgica Met-Mex Peñoles S.A. De C.V.
Mexico	Refinery	La Caridad complex, Nacozari, Sonora	Southern Copper Corp. (Grupo México S.A.B. de C.V.)
Netherlands	Refinery	Moerdijk, North Brabant	Remondis Argentia B.V.
Netherlands	Refinery	Amsterdam, North Holland	Schone Edelmetaal B.V.
New Zealand	Refinery	Penrose, Auckland	Morris and Watson Ltd.
Oman	Refinery	Sohar, Al Batinah North Governorate	Oman Mining Co. LLC (Government, 100%)
Philippines	Refinery	Quezon City, Manila	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)
Poland	Refinery	Glogow, Lower Silesian Voivodeship	Kombinat Gorniczo Hutniczy Miedz Polska Miedz S.A. (KGHM) (Government, 31.79%)

October 2017 16 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Russia	Refinery	Novosibirsk, Novosibirsk Province	AO Novosibirsk Refinery
Russia	Refinery	Kasimov, Ryazanskaya Oblast'	AO Prioksky Plant of Non-Ferrous Metals
Russia	Refinery	Verkhnyaya Pyshma, Sverdlovsk Oblast'	AO Uralelectromed (subsidiary of UGMK)
Russia	Refinery	Moscow	FGUP Moscow Special Alloys Processing Plant
Russia	Refinery	Verkhnyaya Pyshma, Sverdlovsk	JSC Ekaterinburg Non-Ferrous Metal Processing Plant
Russia	Refinery	Krasnoyarsk, Krasnoyarsk Krai	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)
Russia	Refinery	Shyolkovo, Moscow Region	SOE Shyolkovsky Factory of Secondary Precious Metals
Russia	Refinery	Chelyabinsk, Chelyabinskaya Oblast'	ZAO Kyshtym Copper-Electrolytic Plant (subsidiary of Russian Copper Co.)
Saudi Arabia	Refinery	Riyadh, Riyadh Province	L'azurde Company For Jewelry

October 2017 17 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Singapore	Refinery	Tuas, West Region, Singapore	Metalor Technologies (Singapore) Pte., Ltd.
South Africa	Refinery	Johannesburg, Gauteng	AU Traders and Refiners
South Africa	Refinery	Germiston, Gauteng	Rand Refinery (Pty) Ltd.
Spain	Refinery	Madrid, Madrid	SEMPSA Joyería Platería S.A.
Sudan	Refinery	Khartoum, Khartoum State	Sudan Gold Refinery
Suriname	Refinery	Wit' Santi, Para , Wit' Santi, Para	Kaloti Suriname Mint House [Partnership between Kaloti Precious Metals Group (Dubai, United Arab Emirates), The Government of Suriname and local gold traders]
Sweden	Refinery	Skelleftehamn, Ronnskar, Västerbotten	Boliden AB (Boliden Group)
Switzerland	Refinery	Mendrisio, Ticino	Argor-Heraeus S.A.
Switzerland	Refinery	Biel-Bienne, Bern	Cendres + Métaux S.A.

October 2017 18 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Switzerland	Refinery	Marin, Neuchâtel	Metalor Technologies S.A. (Tanaka Kikinzoku Group)
Switzerland	Refinery	Castel San Pietro, Ticino	PAMP S.A. (MKS Group)
Switzerland	Refinery	La Chaux-de-Fonds, Neuchâtel, La Chaux-de-Fonds, Neuchâtel	PX Précinox S.A.
Switzerland	Refinery	Balerna, Ticino	Valcambi S.A. (Global Gold Refineries Ltd.)
Taiwan	Refinery	Dayuan, Taoyuan	Singway Technology Co., Ltd.
Taiwan	Refinery	Tainan City, Taiwan	Solar Applied Materials Technology Corp.
Thailand	Refinery	Dokmai, Pravet	Umicore Precious Metals (Thailand) Inc.
Turkey	Refinery	Istanbul, Istanbul Province	Atasay Kuyumculuk Sanayi Ve Ticaret A.S. (Atasay Group)
Turkey	Refinery	Kuyumcukent, Istanbul	Istanbul Gold Refinery

October 2017 19 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Turkey	Refinery	Bahçelievler, Istanbul	Nadir Metal Rafineri San. Ve Tic. A.Ş.
Turkey	Remicry	Bançenevici, Istanbui	Nauli Metai Kainieri San. Ve Tie. A.Ş.
Uganda	Refinery	Entebbe, Wakiso	Africa Gold Refinery
United Arab Emirates	Refinery	Dubai, Dubai	Al Etihad Gold LLC
United Arab Emirates	Refinery	Al Quoz, Dubai	Al Etihad Gold LLC
United Arab Emirates	Refinery	Dubai, Dubai	Al Ghaith Gold (private, 100%)
United Arab Emirates	Refinery	Dubai, Dubai	Al Ghurair Giga Gold DMCC (private, 100%)
United Arab Emirates	Refinery	Sharjah, Sharjah	ARY Aurum Plus (private, 100%)
United Arab Emirates	Refinery	Jumeriah Lake Towers, Dubai, Dubai	Emirates Gold DMCC
United Arab Emirates	Refinery	Fujairah Free Zone 2, Fujairah	Fujairah Gold FZC (Vendanta Ltd., 100%)

October 2017 20 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
United Arab Emirates	Refinery	Sharjah, Sharjah	Kaloti Jewelry Factory Ltd
Omited Table Zamanes	, come,	Shagan, Shagan	and serion and and an analysis
United Arab Emirates	Refinery	Dubai, Dubai	TLI Global Group (U.K.)
United States	Refinery	Warwick, Rhode Island	Advanced Chemical Company
United States	Refinery	Salt Lake City, Utah	Asahi Refining USA Inc.
United States	Refinery	Milwaukee, Wisconsin	AURA-II
United States	Refinery	Jackson, Ohio, Jackson, Ohio	Elemetal Refining, LLC
United States	Refinery	Warwick, Rhode Island	Geib Refining Corporation
United States	Refinery	Newark, New Jersey	Heraeus Incorporated
United States	Refinery	Magna, Utah	Kennecott Utah Copper LLC

October 2017 21 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
H. 't. I Con.	D. Corre	D. CC.L. N VI	Maria
United States	Refinery	Buffalo, New York	Materion
United States	Refinery	North Attleboro, Massachusetts	Metalor USA Refining Corporation
United States	Refinery	Miami, Florida	Republic Metals Corporation
United States	Refinery	Williston, North Dakota	Sabin Metal Corp.
United States	Refinery	Scottsville, New York	Sabin Metal Corporation
United States	Refinery	Long Island City, New York	So Accurate Group, Inc.
United States	Refinery	Alden, New York	United Precious Metal Refining, Inc.
Uzbekistan	Refinery	Almalyk, Tashkent Province	Almalyk Mining and Metallurgical Complex (AMMC)
Uzbekistan	Refinery	Navoi, Navoiy Province	Navoi Mining and Metallurgical Combinat (NMMC)

October 2017 22 of 22

4—Identified global producers of gold bullion

COUNTRY	FACILITY TYPE	LOCATION	OPERATOR / OWNERSHIP
Zambia	Refinery	Lusaka, Lusaka Province	Universal Precious Metals Refining Zambia
Zambia	Refinery	Lusaka, Lusaka Province	Zambian Gold Refiners Ltd.
Zimbabwe	Refinery	Msasa, Harare	Fidelity Printers and Refiners Ltd.